Bonanza Cuts Flight Time With Portable Terrain Light

FIRST installation of a new-type flashing obstruction light, which promises substantial economies in operations and maintenance, has been made by Bonanza Air Lines to mark mountainous terrain near Las Vegas, Nev.

Frontier Airlines has just placed an order with Light Products, Inc., of Beverly Hills, Calif., for a test installation at a point on its route, and Los Angeles Airways is exploring its possible use as a directional beacon for night helicopter operations.

Big feature of this new portable light is that it is battery operated, but has a longevity of approximately one year because of low drain characteristics. Under normal conditions it is visible for more than 10 miles and its developers report clear night tests in which it was visible from a distance of 40 miles.

First Application

Although the newly designed light is expected to have many uses for warning purposes in other fields, its first application is being made in the models designed especially for aviation. There are three versions, the directional beacon, a 360-degree obstruction light, and a runway or taxiway light.

By installing three of the Neo-Flasher units, as they are called, Bonanza is able to re-route its flights for night operations between Las Vegas and Reno for a savings of approximately 12 minutes per flight.

Incorporating their own power supply, the lights require no wiring or conduits and therefore are fully portable. A complete unit weighs 120 lbs. Bonanza took its lights into the mountains on mule back.

The lights will require no attention for a year, according to Frank L. Ray, chief engineer of Light Products, Inc., and developer of the device. The lights automatically turn on in darkness and off in daylight through the operation of a selenium cell governed by the fluctuations in foot candlepower in the morning and evening hours actuating a relay.

Circuit Interruptor

The surprising longevity of the dry batteries is due mainly to a new-type circuit interrupter developed and patented by the new company, and a high-speed transformer which saturates and dissipates the entire energy in microseconds. The contact is about two 1/1000ths of a second for each flash and it required a year's time to develop a transformer that would do the trick.

In addition, a special 12-volt power pack was engineered to take further advantage of the low drain characteristics of the electric assembly,

New Obstruction Light—Illustration shows portable light of the type installed by Bonanza Air Lines to save 12 minutes on night schedules between Reno and Las Vegas. Because of unusually low drain on battery, the new CAA-approved automatic light will operate for a year without servicing.